

**1. (currently amended):** An aqueous polymer dispersion comprising a copolymer of anhydride monomer units and vinyl monomer units, which copolymer has been subjected to an imidization reaction, ~~characterised~~ characterized in that at least 90 mole % of the anhydride monomer units of the copolymer are imidized.

**2. (currently amended):** An aqueous dispersion as claimed in claim 1, ~~characterised~~ characterized in that the anhydride monomer content of the copolymer ranges between 5-50 mole %, ~~preferably 5-20 mole %~~ and the vinyl monomer content of the copolymer ranges between 95-50 mole %, ~~preferably 95-81 mole %~~.

**3. (currently amended):** An aqueous dispersion as claimed in ~~claims~~ claim 1 ~~or 2~~, ~~characterised~~ characterized in that the copolymer has a molecular weight ranging between 1000-500000 g/mole, ~~preferably between 10000-300000 g/mole, more preferably between 60000-150000 g/mole~~.

**4. (currently amended):** An aqueous dispersion as claimed in ~~any one of claims 1-3~~ claim 1, ~~characterised~~ characterized in that the copolymer is a copolymer composition comprising a plurality of copolymers having varying molecular weights.

**5. (currently amended):** An aqueous dispersion as claimed in ~~any one of claims 1-4~~ claim 1, ~~characterised~~ characterized in that the dispersion has a solid content of more than 20 wt. %, ~~preferably more than 30 wt. %, more preferably more than 40 wt. %~~.

**6. (currently amended):** An aqueous dispersion as claimed in ~~any one of claims 1-5~~ claim 1, ~~characterised~~ characterized in that the polymer dispersion comprises discrete particles having a particle size between approximately 30-400 nm, ~~preferably between 30-120 nm~~.

**7. (currently amended):** An aqueous dispersion as claimed in claim 1, ~~characterised~~ characterized in that the copolymer contains maleic anhydride monomer units and styrene monomer units.

**8. (currently amended):** A method for the production of an aqueous polymer dispersion comprising the steps of

- 1) reacting a starting copolymer of anhydride monomer units and a vinyl monomer units in an aqueous solution of  $\text{NH}_3$  or an amine  $\text{RNH}_2$ ,

2) subjecting the thus obtained mixture to an imidization reaction,

~~characterised~~ characterized in that the imidization reaction is carried out under reaction conditions which are selected so that at least 90 mole % of the anhydride monomer units have been imidized.

**9. (currently amended):** A method as claimed in claim 8, ~~characterised~~ characterized in that the imidization reaction is continued until a degree of imidization of the copolymer of at least 95 mole %, ~~preferably virtually complete imidization,~~ is obtained.

**10. (currently amended):** A method as claimed in claim ~~8 or 9,~~ claim 8, ~~characterised~~ characterized in that the imidization reaction is carried out in the presence of an alkali salt of an acid functional polymer containing acid functional monomer units and vinyl aromatic monomer units, ~~preferably alkali salt of styrene maleic anhydride copolymer.~~

**11. (currently amended):** A method as claimed in ~~any one of claims 8-10~~ claim 8, ~~characterised~~ characterized in that the copolymer has a molecular weight ranging between 1000-500000 g/mole, ~~preferably between 10000-300000 g/mole, more preferably between 60000-150000 g/mole.~~

**12. (currently amended):** A method as claimed in ~~any one of claims 8-11~~ claim 8, ~~characterised~~ characterized in that  $\text{NH}_3$  or  $\text{RNH}_2$  is added in such an amount that the ratio of  $\text{NH}_3$  or amine : anhydride monomer in the starting copolymer is between 0.5-10:1.

**13. (currently amended):** A method as claimed in ~~any one of claims 8-12~~ claim 8, ~~characterised~~ characterized in that the molar ratio between the amine or  $\text{NH}_3$  and the anhydride monomer in the copolymer ranges between 1.2-0.8:1, ~~preferably slightly under the equimolar ratio.~~

**14. (currently amended):** A method as claimed in ~~any one of claims 8-13~~ claim 8, ~~characterised~~ characterized in that in the course of the imidization reaction, the reaction mixture is stirred so as to ~~minimise~~ minimize adhesion of the reaction mixture to the reactor wall.

**15. (currently amended):** A method as claimed in ~~any one of claims 8-14~~ claim 8, ~~characterised~~ characterized in that the imidization reaction is carried out at a temperature above  $100^\circ\text{C}$ , ~~preferably between  $120-185^\circ\text{C}$ , more preferably at a temperature between  $150-175^\circ\text{C}$ .~~

**16. (currently amended):** An aqueous coating composition for coating a product to be imprinted, ~~characterised~~ characterized in that the coating composition contains a polymer dispersion as claimed in ~~any one of claims 1-7~~ claim 1 ~~or a polymer dispersion obtained with the method of any one of claims 8-15.~~

**17. (original):** An aqueous coating composition according to claim **16**, further containing binders, conventional pigments and, optionally, additives.

**18-19. (cancelled).**

**20. (new):** A method of coating a surface to be imprinted comprising applying to said surface a polymer dispersion according to claim **1**.

**21. (new):** A method according to claim **20**, characterized in that the surface is paper, paperboard, cardboard, organic film e.g. polyethylene film, metal or textile.